

**INTENSIVE ARCHAEOLOGICAL RESOURCES SURVEY OF THE HIGHWAY 151
TO CAMARGO PARK SEGMENT OF THE PROPOSED LEON CREEK HIKE AND
BIKE TRAIL PROJECT, BEXAR COUNTY, TEXAS**

Prepared for

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ABSTRACT

On behalf of Vickrey & Associates, Inc. (V&A) and the City of San Antonio (COSA), SWCA Environmental Consultants (SWCA) conducted an intensive cultural resources survey of the proposed Highway 151 to Camargo Park segment of the Leon Creek Hike and Bike Trail Project in central Bexar County. The proposed project will involve the construction of a hike and bike trail along Leon Creek on land owned by the City of San Antonio. Exact proposed subsurface impacts are not known at this time, but are not expected to exceed 8 to 32 inches throughout the trail and up to 25 feet at the two creek crossings for the installation of pedestrian bridges. The width of the trail is 20 to 30 feet where it follows existing pavement, and 16 feet elsewhere. Overall the area of potential effects (APE) is 13,464 feet long (2.55 miles), 30 feet wide, and maximally 25 feet deep, for a total area of 9.37 acres. Cultural resource investigations will be performed as part of COSA's compliance with the Antiquities Code of Texas (Permit No. 5945) and the San Antonio Historic Preservation Office (HPO) per the City of San Antonio Historic Preservation and Design Section of the Unified Development Code (Article 6 35-630 to 35-634). There is no Federal funding, permitting, or lands involved; therefore, no Federal/NHPA compliance is necessary.

The purpose of the work was to locate and identify all prehistoric and historic archaeological sites in the project area, establish vertical and horizontal site boundaries as appropriate with regard to the APE, and evaluate the significance and eligibility of any site recorded within the APE for designation as a State Archaeological Landmark (SAL) according to 13 TAC 26.12. SWCA archaeologists Matthew Stotts and Sarah Wittenauer conducted the fieldwork on May 24 and 25, 2011.

The investigations included a background literature and records review and an intensive pedestrian survey with subsurface investigations. The background review revealed that a small portion of the project area has been previously surveyed and that no previously recorded sites are located within or adjacent to the project area. Five previously recorded archaeological sites, seven archeological surveys, four testing investigations, and two historical markers are recorded within a one-mile radius of the project area.

The intensive survey of the APE included three backhoe trenches and nine shovel tests placed in areas that had the potential for containing buried cultural materials with good integrity. The majority of the project area however, was characterized by extensive disturbance due to modern development and commercial quarrying. No new archaeological sites were documented as a result of the investigation. Based on these results, SWCA recommends no further archaeological investigations within the proposed Leon Creek Hike and Bike Trail project area. No artifacts were collected; therefore, nothing was curated.

TABLE OF CONTENTS

| | |
|----------------------------------|----|
| Introduction..... | 1 |
| Definition of Study Area..... | 1 |
| Environmental Setting | 1 |
| Cultural Setting | 3 |
| Paleoindian Period | 3 |
| Archaic Period | 4 |
| Late Prehistoric Period..... | 5 |
| Historic Period | 5 |
| Methods | 6 |
| Background Review..... | 6 |
| Field Methods | 6 |
| Results..... | 7 |
| Background Review..... | 7 |
| Field Survey | 9 |
| Summary and Recommendations..... | 21 |
| References..... | 25 |

List of Figures

| | |
|--|----|
| Figure 1. Project location map..... | 2 |
| Figure 2. Project location on the 1927 USACE West San Antonio map..... | 10 |
| Figure 3. Survey results map. | 11 |
| Figure 4. Proposed Area of Potential Effects within paved Nelson W. Wolffe Memorial Stadium parking lot. | 12 |
| Figure 5. Area of Potential Effects south of Levi Strauss driveway, facing west..... | 12 |
| Figure 6. BHT 1 south wall profile..... | 15 |
| Figure 7. BHT 2 south wall profile..... | 17 |
| Figure 8. Worn trail between Old Highway 90 and Rodriguez Park, facing southeast. | 17 |
| Figure 9. Area of Potential Effects south of Leon Creek and Rodriguez Park with manhole, facing east..... | 18 |
| Figure 10. BHT3 east wall profile. | 18 |
| Figure 11. Area of Potential Effects on north bank of Leon Creek within Rodriguez Park, facing north. | 19 |
| Figure 12. Area of Potential Effects within Rodriguez Park, south of pavilion, facing east. | 19 |
| Figure 13. Area of Potential Effects within Rodriguez Park between pavilion and Rodriguez Blvd., facing west..... | 20 |
| Figure 14. Large spoil pile immediately west of the Area of Potential Effects at south end of loop, facing west..... | 23 |
| Figure 15. Sidewalk along east side of Gena Drive, facing north. | 23 |
| Figure 16. Area of Potential Effects along existing gravel trail within Rodriguez Park. North of Jerome Road, facing west..... | 24 |

List of Tables

| | |
|------------------------------------|----|
| Table 1. Shovel Test Data | 13 |
| Table 2. Backhoe Trench Data | 16 |

INTRODUCTION

On behalf of Vickrey & Associates, Inc. (V&A) and the City of San Antonio (COSA), SWCA Environmental Consultants (SWCA) conducted an intensive cultural resources survey of the proposed 2.55-mile Highway 151 to Camargo Park segment of the Leon Creek Hike and Bike Trail Project in central Bexar County, Texas (Figure 1). Cultural resource investigations were conducted to satisfy the requirements of the Antiquities Code of Texas (Permit No. 5945) and the San Antonio Historic Preservation Office (HPO) per the City of San Antonio Historic Preservation and Design Section of the Unified Development Code (Article 6 35-630 to 35-634). These investigations included a background and archival review and an intensive pedestrian survey with subsurface investigations. SWCA archaeologists Matthew Stotts and Sarah Wittenauer conducted the fieldwork on May 24 and 25, 2011.

DEFINITION OF STUDY AREA

Situated in west San Antonio, Texas, the project area is located approximately 1 mile west of the intersection of U.S. 90 and Highway 151 in Bexar County, Texas. The southeastern end of the trail begins near the San Antonio Parks and Recreation Headquarters (5800 Old Highway 90 West) and winds through nearby Levi Strauss Park before crossing Leon Creek. The trail then proceeds across Old Highway 90 and crosses Leon Creek a second time near the southwest corner of Rodriguez Community Park. From there, the trail proceeds due east to the intersection of Keitha Blvd. and Rodriguez Road then completes a one-mile loop through a wooded area of reclaimed pit/quarry land. The proposed project will involve the construction of a hike and bike trail along Leon Creek on land owned by the City of San Antonio (COSA). Exact proposed subsurface impacts are not

known at this time, but are not expected to exceed 8 to 32 inches throughout the trail and up to 25 feet at the two creek crossings for the installation of pedestrian bridges. Overall the area of potential effects (APE) is 13,464 feet long, 30 feet wide, and maximally 25 feet deep, for a total area of 9.37 acres.

The southeastern half of the project area traverses graded and developed park properties on both the south and north sides of Old Highway 90, with the central portion of this segment following a worn trail along the low terrace to the south of Leon Creek. The northwestern half consists of a loop through a former quarry/pit area that has been subject to extensive mechanical excavation and subsequently filled. This area has been fallow for many years as evidenced by a number of large trees within the wooded area. A small portion of this loop is currently paved roadway (Keitha Blvd. and an unnamed driveway). An approximately 0.5-mile segment of the proposed project area follows an existing gravel trail within Rodriguez Park and Gena Drive, where it adjoins the proposed railway within Levi Strauss Park. Ground surface visibility ranged from 20 to 100 percent, with an average of approximately 60 percent for the overall project area.

ENVIRONMENTAL SETTING

The project area is mapped as 75 percent Holocene Alluvium (floodplain deposits) and 25 percent Quaternary-age Fluvial Terrace deposits. Holocene Alluvium is floodplain deposits comprised of clay, silt, sand, gravel, and organic material, probably reworked from terrace deposits (Fisher 1983). Fluvial Terrace deposits are made up of predominately gravel, limestone, dolomite, and chert (Fisher 1983). The deposits also consist of sand, silt, and clay. Most low terrace deposits along entrenched streams like Leon Creek are above flood level (Fisher 1983).

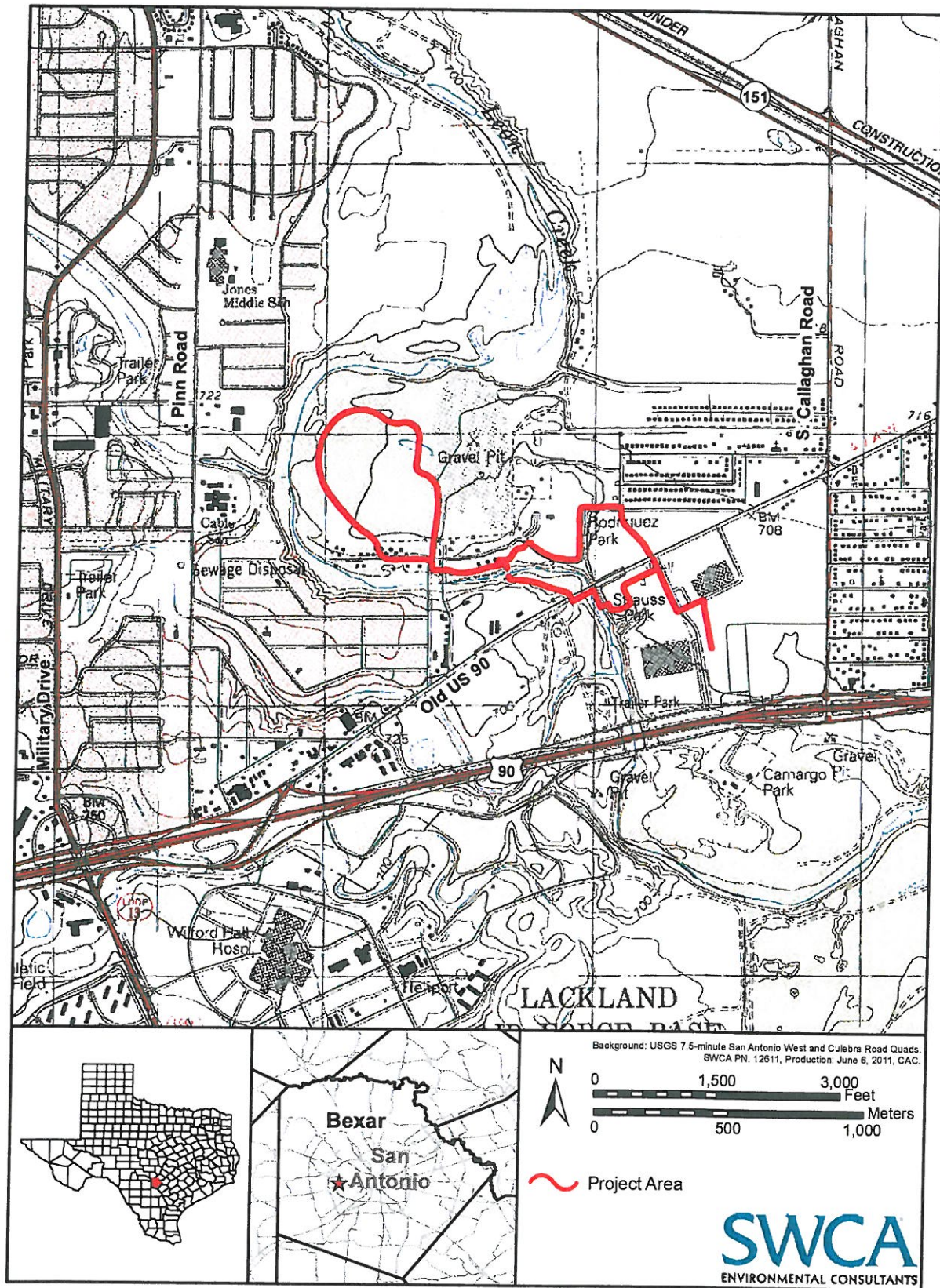


Figure 1. Project location map.

Five types of soil are mapped in the project area: Lewisville silty clay, Pits and Quarries, Patrick soils, Frio clay loam, and Venus clay loam (Taylor et al. 1991). Approximately 20 percent of the project area is mapped as Lewisville silty clay with 0 to 3 percent slopes. These soils generally occupy nearly level, broad terraces along Leon Creek and long, narrow, sloping areas that separate nearly level terraces from the uplands (Taylor et al. 1991:25). Lewisville soils are confined to the portion of the trail that passes through Levi Strauss Park and the adjacent Parks and Recreation Headquarters property.

Pits and Quarries comprise 32 percent of the project area and are confined to the northeastern portion where the trail makes a loop. This land type consists of gravel, clay, or sand pits, limestone, chalk, or rock quarries, and city dumps (Taylor et al. 1991:27). Patrick soils with 3 to 5 percent slopes comprise 31 percent of the APE and are shallow, dark-colored calcareous clay loams found on terraces along streams, such as Leon Creek, that drain limestone prairies (Taylor et al. 1991:27).

Another 14 percent of the project area is mapped as Frio clay loam with 0 to 1 percent slopes. This soil is occasionally flooded and occurs mainly on the flood plains of Leon Creek, or on low terraces boarding the flood plains (Taylor et al. 1991:16). Frio clay loam is a limy alluvial soil that is moderately deep and grayish brown to dark grayish brown. Finally, Venus clay loam with 1 to 5 percent slopes comprises the remainder of the APE. This soil occupies small, narrow terraces that parallel and slope toward Leon Creek. The surface layer is about 24 inches thick (Taylor et al. 1991:33).

CULTURAL SETTING

The proposed project area falls within Central Texas Archeological Region (Perttula 2004).

Although the archaeological regions are not absolute, they do generally reflect recognized biotic communities and physiographic areas in Texas (Perttula 2004:6). The Central Texas Region, as its name implies, is in the center of Texas and covers the Edwards Plateau and portions of the Blackland prairie east of the Edwards Plateau. The following synopses provide basic culture histories of the Central Texas region.

The archaeological record of the Central Texas region is known from decades of investigations of stratified open air sites and rockshelters throughout the Edwards Plateau, its highly dissected eastern and southern margins, and the adjoining margins of physiographic regions to the east and south (see Collins [2004] for review). Traditionally, the Central Texas archaeological area has included the Balcones Canyonlands and Blackland Prairie—that is, north of San Antonio (e.g., Prewitt 1981; Suhm 1960). These two areas are on the periphery of the Central Texas archaeological area, and their archaeological records and projectile point style sequences contain elements that suggest influences from and varying degrees of contact over time with other areas such as the Lower Pecos and Gulf Coastal Plain (Collins 2004; Johnson and Goode 1994). For more-complete bibliographies concerning archaeological work done in the region, see Black (1989), Collins (1995), and Johnson and Goode (1994).

PALEOINDIAN PERIOD

Surficial and deeply buried sites, rockshelter sites, and isolated artifacts represent Paleoindian (11,500–8,800 B.P.) occupations of the Central Texas region (Collins 2004:116). The period is often described as having been characterized by small but highly mobile bands of foragers who were specialized hunters of Pleistocene megafauna. But Paleoindians probably used a much wider array of resources (Meltzer and Bever 1995:59), including small

fauna and plant foods. Faunal remains from Kincaid Rockshelter and the Wilson-Leonard site (41WM235) support this view (Bousman 1998; Collins 1998; Collins et al. 1989). Longstanding ideas about Paleoindian technologies also are being challenged.

Collins (2004) divides the Paleoindian period into early and late subperiods. Two projectile point styles, Clovis and Folsom, are included in the early subperiod. Clovis chipped stone artifact assemblages, including the diagnostic fluted lanceolate Clovis point, were produced by bifacial, flake, and prismatic-blade techniques on high-quality and oftentimes exotic lithic materials (Collins 1990). Along with chipped stone artifacts, Clovis assemblages include engraved stones, bone and ivory points, stone bolas, and ochre (Collins 2004:116; Collins et al. 1992). Clovis points are found evenly distributed along the eastern edge of the Edwards Plateau, where the presence of springs and outcrops of chert-bearing limestone are common (Meltzer and Bever 1995:58). Sites within the area yielding Clovis points and Clovis-age materials include Kincaid Rockshelter (Collins et al. 1989), Pavo Real (Henderson and Goode 1991), and San Marcos Springs (Takac 1991). A probable Clovis polyhedral blade core and blade fragment was found at the Greenbelt site in San Antonio (Houk et al. 1997). Analyses of Clovis artifacts and site types suggest that Clovis peoples were well-adapted, generalized hunter-gatherers with the technology to hunt larger game but not solely rely on it.

In contrast, Folsom tool kits—consisting of fluted Folsom points, thin unfluted (Midland) points, large thin bifaces, and end scrapers—are more indicative of specialized hunting, particularly of bison (Collins 2004:117). Folsom points have been recovered from Kincaid Rockshelter (Collins et al. 1989) and Pavo Real (Henderson and Goode 1991).

Postdating Clovis and Folsom points in the archaeological record are a series of dart point styles (primarily unfluted lanceolate darts) for which the temporal, technological, or cultural significance is unclear. Often, the Plainview type name is assigned these dart points, but Collins (2004:117) has noted that many of these points typed as Plainview do not resemble Plainview type-site points in thinness and flaking technology. Nonetheless, it has become clear that the artifact and feature assemblages of the later Paleoindian subperiod appear to be Archaic-like in nature and in many ways may represent a transition between the early Paleoindian and succeeding Archaic periods (Collins 2004:118).

ARCHAIC PERIOD

The Archaic period for Central Texas dates from ca. 8,800 to 1,300–1,200 B.P. (Collins 2004:119–121) and generally is believed to represent a shift toward hunting and gathering of a wider array of animal and plant resources and a decrease in group mobility (Willey and Phillips 1958:107–108). In the eastern and southwestern United States and on the Great Plains, development of horticultural-based, semisedentary to sedentary societies succeeds the Archaic period. In these areas, the Archaic truly represents a developmental stage of adaptation as Willey and Phillips (1958) define it. For Central Texas, this notion of the Archaic is somewhat problematic. An increasing amount of evidence suggests that Archaic-like adaptations were in place before the Archaic (see Collins 2004:118, 1998; Collins et al. 1989) and that these practices continued into the succeeding Late Prehistoric period (Collins 1995:385; Prewitt 1981:74). In a real sense, the Archaic period of Central Texas region is not a developmental stage, but an arbitrary chronological construct and projectile point style sequence. Establishment of this sequence is based on several decades of archaeological investigations at stratified Archaic sites along the eastern and southern margins of

the Edwards Plateau. Collins (1995, 2004) and Johnson and Goode (1994) have divided this sequence into three parts—early, middle, and late—based on perceived (though not fully agreed upon by all scholars) technological, environmental, and adaptive changes.

The use of rock and earth ovens (and the formation of burned rock middens) for processing and cooking plant foods suggests that this technology was part of a generalized foraging strategy. The amount of energy involved in collecting plants, constructing hot rock cooking appliances, and gathering fuel ranks most plant foods relatively low based on the resulting caloric return (Dering 1999). This suggests that plant foods were part of a broad-based diet (Kibler and Scott 2000:134) or part of a generalized foraging strategy, an idea Prewitt (1981) put forth earlier. At times during the Late Archaic, this generalized foraging strategy appears to have been marked by shifts to a specialized economy focused on bison hunting (Kibler and Scott 2000:125–137). Castroville, Montell, and Marcos dart points are elements of tool kits often associated with bison hunting (Collins 1968). Archaeological evidence of this association is seen at Bonfire Shelter in Val Verde County (Dibble and Lorrain 1968), Jonas Terrace (Johnson 1995), Oblate Rockshelter (Johnson et al. 1962:116), John Ischy (Sorrow 1969), and Panther Springs Creek (Black and McGraw 1985).

LATE PREHISTORIC PERIOD

Introduction of the bow and arrow and, later, ceramics into Central Texas marked the Late Prehistoric period. Population densities dropped considerably from their Late Archaic peak (Prewitt 1985:217). Subsistence strategies did not differ greatly from the preceding period, although bison again became an important economic resource during the late part of the Late Prehistoric period (Prewitt 1981:74). Use of rock and earth ovens for

plant food processing and the subsequent development of burned rock middens continued throughout the Late Prehistoric period (Black et al. 1997; Kleinbach et al. 1995:795). Horticulture came into play very late in the region but was of minor importance to overall subsistence strategies (Collins 2004:122).

In Central Texas, the Late Prehistoric period generally is associated with the Austin and Toyah phases (Jelks 1962; Prewitt 1981:82–84). Austin and Toyah phase horizon markers, Scallorn-Edwards and Perdiz arrow points, respectively, are distributed across most of the state. Violence and conflict often marked introduction of Scallorn and Edwards arrow points into Central Texas—many excavated burials contain these point tips in contexts indicating they were the cause of death (Prewitt 1981:83). Subsistence strategies and technologies (other than arrow points) did not change much from the preceding Late Archaic period. Prewitt's (1981) use of the term "Neoarchaic" recognizes this continuity. In fact, Johnson and Goode (1994:39–40) and Collins (2004:122) state that the break between the Austin and Toyah phases could easily and appropriately represent the break between the Late Archaic and the Late Prehistoric.

HISTORIC PERIOD

Hester (1989) and Newcomb (1961) provide historical accounts of Native Americans and their interactions with the Spanish, the Republic of Mexico, the Texas Republic, and the United States throughout the region. The beginning of the late seventeenth and early eighteenth centuries was an era of more-permanent contact between Europeans and Native Americans as the Spanish moved northward out of Mexico to establish settlements and missions on their northern frontier (see Castañeda [1976] and Bolton [1970] for extended discussions of the mission system and Indian relations in Texas and the San Antonio area). There is little available information on abori-

ginal groups and their ways of life except for the fragmentary data Spanish missionaries gathered. In the San Antonio area and areas to the south, these groups have been referred to collectively as Coahuiltecan because of an assumed similarity in way of life, but many individual groups may have existed (Campbell 1988). Particular Coahuiltecan groups, such as the Payaya and Juanca, have been identified as occupying the San Antonio area (Campbell 1988). This area also served as a point of contact between the southward-advancing Apaches and the Spanish, with native groups often caught in between. Disease and hostile encounters with Europeans and intruding groups such as the Apache were already wreaking their inevitable and disastrous havoc on native social structures and economic systems by this time.

Establishment of the mission system in the first half of the eighteenth century to its ultimate demise around 1800 brought the peaceful movement of some indigenous groups into mission life, but others were forced in or moved in to escape the increasing hostilities of southward-moving Apaches and Comanches. Many of the Payaya and Juanca lived at Mission San Antonio de Valero (the Alamo), but so many died there that their numbers declined rapidly (Campbell 1988:106, 121–123). By the end of the mission period, European expansion and disease and intrusions by other Native American peoples had decimated many Native American groups. The nineteenth century brought the final decimation of many Native American groups, the United States' defeat of the Apaches and Comanches, and the forced removal of Native Americans to reservations.

METHODS

BACKGROUND REVIEW

SWCA conducted a thorough background cultural resources and environmental literature search of the project area. An SWCA archaeologist reviewed the San Antonio West and Culebra Hill, Texas, USGS 7.5-minute topographic quadrangle maps at the Texas Archeological Research Laboratory (TARL) and searched the Texas Historical Commission's (THC) Texas Archeological Sites Atlas (Atlas) online database for any previously recorded surveys and historic or prehistoric archaeological sites located in or near the project area. In addition to identifying recorded archaeological sites, the review included information on the following types of cultural resources: National Register of Historic Places (NRHP) properties, State Archeological Landmarks (SALs), Official Texas Historical Markers, Registered Texas Historic Landmarks (RTHLs), cemeteries, and local neighborhood surveys. The archaeologist also examined the *Soil Survey of Bexar County, Texas* (Taylor et al. 1991) and the *Geologic Atlas of Texas, San Antonio Sheet* (Fisher 1983), seven maps from the TxDOT Historic Map Overlay (1845, 1871, 1887, 1903, 1918, 1927, and 1953), and the circa 1940s Stoner System Map Sheets 1092 and 1093. Current aerial photographs were reviewed to assist in identifying any disturbances.

FIELD METHODS

SWCA conducted an intensive cultural resources survey of the 2.55-mile Highway 151 to Camargo Park segment of the Leon Creek Hike and Bike Trail APE. These investigations consisted of an intensive pedestrian survey with subsurface investigations including backhoe trenching and shovel testing.

Archaeologists performed pedestrian survey examining the ground surface and erosional profiles for cultural resources. Shovel testing was employed in undisturbed areas with a potential for shallowly (less than 1 meter) buried sites. Where performed, shovel tests were systematically excavated in 20-cm arbitrary levels to culturally sterile deposits. The matrix was screened through ¼-inch mesh and each test was recorded on appropriate project field forms. The location of each shovel test was plotted using a GPS receiver.

Backhoe trenching was conducted within the floodplain and terraces along Leon Creek where deeply buried archaeological sites were potentially present, and proposed impacts exceed the maximum reachable shovel test depth. Backhoe trenches were excavated to a depth sufficient to determine the presence/absence of buried cultural materials, after which all cultural and geomorphic information was recorded on standardized forms. Trenching was monitored by an experienced archaeologist while excavations were underway. Stratigraphic profile drawings with soils descriptions are recorded for each trench by an experienced archaeologist and all Occupational Safety and Health Standards (OSHA) safety protocols were followed. Following complete documentation, backhoe trenches were back-filled and leveled.

RESULTS

BACKGROUND REVIEW

The background review revealed that a portion of the project area (0.3 miles) has been previously surveyed and no previously recorded site is within or adjacent to the project area. Five previously recorded archaeological sites, seven archeological surveys, four testing investigations, and two historical markers are recorded within a one-mile radius of the project area. Based on a review of historic

maps, the earliest depiction of any settlement along the APE is of Lewis' Rancho in 1845. From 1903 to circa 1940s, two structures are consistently depicted near the APE's intersection with Levi Strauss Park; however, by 1953 they are no longer standing.

The first of these archaeological investigations overlaps approximately 0.3 miles of the trail in the southern portion of the project area just off Rodriguez Blvd., north of U.S. 90. This survey of a 37-acre proposed addition to Rodriguez Park was completed in 1988 by archaeologists from the University of Texas at San Antonio Center for Archaeological Research (UTSA-CAR) under Texas Antiquities Code (TAC) Permit 689. The survey encountered no archaeological sites within the current project area (Highley and Hafernik 1988).

A second survey was located adjacent to the project area along Highway 151 on the northern boundary of this segment of the Leon Creek Trails Project area. This survey was completed in August of 1985 by archaeologists from the State Department of Highways and Public Transportation (SDHPT) and encountered one archaeological site 0.57 miles west of the Leon Creek Trails Project area (Atlas). Site 41BX683 was recorded atop a bluff on the south bank of Leon Creek in what is now Highway 151 right-of-way. It is a surficial lithic scatter without features or diagnostic artifacts. It was recommended not eligible for inclusion to the NRHP or for designation as an SAL and no further work was recommended (Atlas).

The third survey was located across from the Guerra School at the intersection of Herbert Lane and Castroville Rd. This survey was completed in 1979 by archaeologists from the Heritage Conservation and Recreation Service (HCRS) and encountered no archaeological sites within 1 mile of the Leon Creek Trails Project area.

The fourth survey was located on the Lackland Air Force Base south of U.S. 90. This survey was conducted by archaeologists from UTSA-CAR on behalf of National Parks Service (NPS) and the U.S. Air Force (USAF) in May 1995, and a testing project followed the next year. The survey encountered one archaeological site within 1 mile of the Leon Creek Trails Project area. Site 41BX1108 was recorded 0.64 miles southeast of the Leon Creek Trails Project area (Atlas). This site is a prehistoric campsite with a possible midden. Artifacts recovered included lithic debitage, bifaces, fire-cracked rock, fossil and mollusk shell. This site is located on the northeast end of the Lackland Air Force Base Golf Course. Site 41BX1108 was recommended for further testing and archaeomagnetic dating (Atlas). USAF also sponsored two testing projects by Geo-Marine, Inc. (GMI) within a mile of the project area, in 2003 and 2006. No further information was available on the Atlas for these testing projects.

PBS&J conducted a survey of the proposed Culebra/Loop 410 Regional Storm Water Facility along Leon Creek on behalf of the City of San Antonio in 2003 under TAC Permit 2954. Three sites, 41BX1534, 41BX1535, and 41BX1536, were recorded during the survey and are all about a mile from the project area (Smith et al. 2003).

Site 41BX1534 is a multi-component site consisting of a prehistoric open campsite and an abandoned horse riding club on a level terrace east of Leon Creek. Site 41BX1535 is a small surficial lithic scatter site consisting of sparse debitage without features or diagnostic artifacts. Site 41BX1536 is a small hilltop lithic scatter site also consisting of sparse debitage without features or diagnostic artifacts. No assessments of the sites' NRHP or SAL eligibility were recorded; however, further investigations of the prehistoric component at 41BX1534 were recommended, while no fur-

ther work was recommended at sites 41BX1535 or 41BX1536 (Atlas).

The sixth survey was conducted by CAR on behalf of HNTB and TxDOT in 2008 along Loop 410 under TAC Permit 3003. The survey did not encounter any archaeological sites within 1 mile of the Leon Creek Trails Project area (Figuerola et al. 2008).

The final survey was conducted by SWCA on behalf of San Antonio Water System (SAWS) of the San Antonio Western Watershed Relief Line W-04 under TAC Permit 3592. This survey did not record any archaeological sites within 1 mile of the project area (Carpenter 2005). The final testing project within 1 mile of the project area was conducted by Abasolo Consultants on behalf of Bexar County in 2007 under TAC Permit 4840. No cultural materials were encountered (Shafer 2008).

Two Texas Historic Markers are within 1 mile of the project area. Marker 3021, honoring Moses Lapham, is 0.08 miles west of the southern end of the project area, while Marker 10031, honoring the Duecker Family Homestead, is 0.9 miles west of its northern end. The text of Lapham's marker, which was erected in 1936, reads,

"Near here on October 20, 1838 Moses Lapham, a veteran of San Jacinto, and three of his companions were killed by Indians, as were seven members of a rescue party on the following day."

The text of the Duecker family marker reads,

"August Duecker, Sr. (1828-1894) came to Texas from his native Germany in 1852. He married Louise Feuge in 1854, and in 1878 they purchased a large farm in this area. Their son, August, Jr., and his wife Lina bought part of the homestead in 1886, and in 1888

built this house with native stone quarried from family land. Although enlarged over the years to accommodate the family, the two-story limestone house is a fine example of a rural German Texan homestead. Recorded Texas Historic Landmark – 1993”

Seven maps from the TxDOT Historic Map Overlay that depict the APE were reviewed for the years 1845, 1871, 1887, 1903, 1918, 1927, and 1953. The 1845 map of San Antonio and vicinity depicts Lewis’ Rancho near the southern terminus of the APE. By 1871 and 1887, the APE appears across three parcels owned by F. Rivas, Rafael Herrera, and J. Delgado (GLO map and Rullman map, respectively). There are two structures north of the APE’s intersection with Levi Strauss Park depicted on the 1903 USGS map of San Antonio; these structures may be associated with Lewis’ Ranch; however, they do not appear on the 1871 or 1887 maps. The 1918 USACE map of Lytle depicts these same two structures with a plowed field north of them. In 1927 the USACE map of West San Antonio continues to depict two structures at this location (Figure 2). Property owners along the APE are depicted on the circa 1940s Stoner Sytem Map Sheets 1092 and 1093, including J. E. Popham, Joe Pinn, Mrs. Ida Pinn, William Pinn, J. A. McDavitt, and C. M. Hocker. Two structures are depicted within C. M. Hocker’s property and correspond to those appearing on the 1903, 1918, and 1927 maps. By 1953, structures are no longer depicted at this location.

Thus, the historic map review revealed that the earliest depiction of any settlement along the APE is of Lewis’ Rancho in 1845, although the first appearance of structures at this location is on the 1903 map. From 1903 to circa 1940s, two structures are consistently depicted near the APE’s intersection with Levi

Strauss Park; but, by 1953 no trace of them remains.

FIELD SURVEY

On May 24 and 25, 2011, two SWCA archaeologists conducted an intensive pedestrian survey of the 2.55-mile Highway 151 to Camargo Park segment of the Leon Creek Hike and Bike Trail APE (Figure 3). Beginning at the southeastern terminus, approximately 250 m of the proposed APE consists of paved areas within the Nelson W. Wolff Municipal Stadium parking lot and a small road across the south side of San Antonio Parks and Wildlife Department property (Figure 4). Further disturbance in unpaved portions of the southeastern half of the project area include an artificial drainage ditch, planted trees, and surface grading, particularly within Levi Strauss Park. The portion of the APE that follows the south side of the park driveway is lined with recently planted trees that have disturbed soils beyond the proposed depth of impact (Figure 5). A total of three shovel tests were excavated within Levi Strauss Park all of which were negative for cultural material. The soils encountered were very dry and compact fine sandy to silty, gravelly clay (Table 1). These three shovel tests were terminated at depths ranging from 15 to 56 cmbs due to compact, sterile soil. Surface visibility within Levi Strauss Park averaged approximately 80 percent within the APE.

The next segment of the APE, along Leon Creek, drops into the floodplain from the high eastern terrace along a sloping bank, crosses the active creek channel due south of Old Highway 90, then crosses under the highway and follows a worn path across the low, western Leon Creek terrace before crossing the channel again to the north and into Rodriguez Park. The two creek crossing areas were explored with backhoe trenching due to the possibility of deeply buried archaeological sites

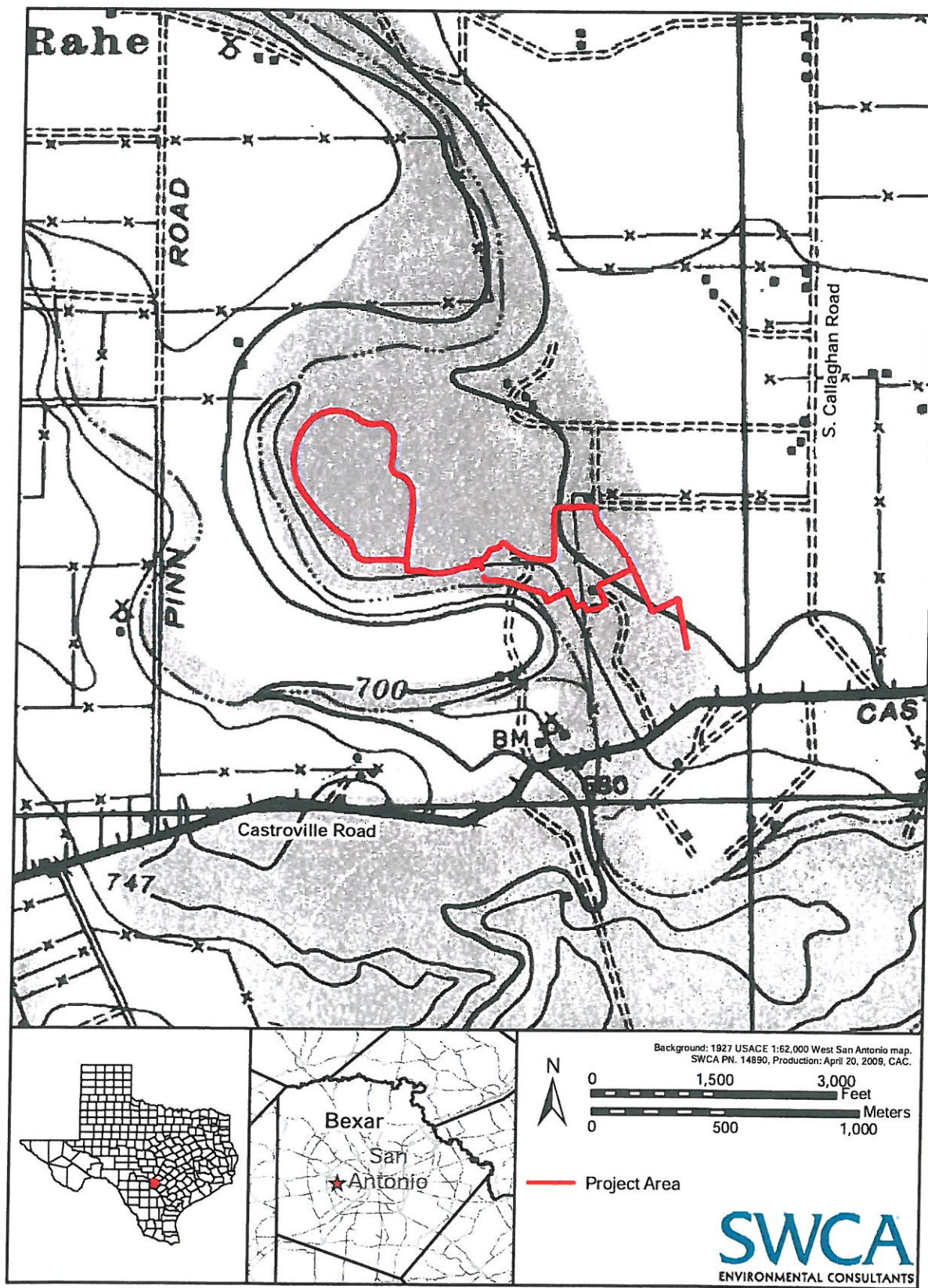


Figure 2. Project location on the 1927 USACE West San Antonio map.

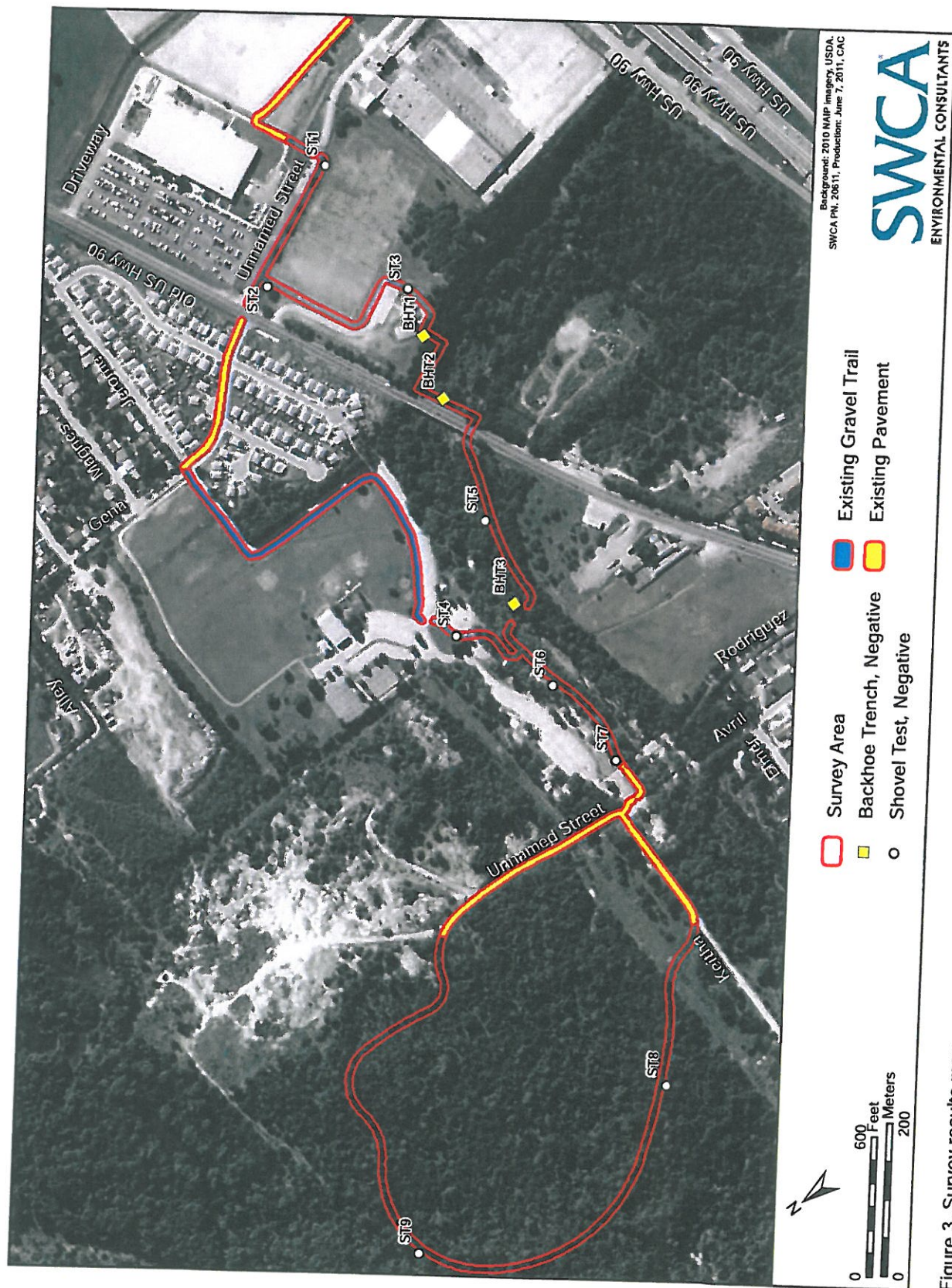


Figure 3. Survey results map.



Figure 4. Proposed Area of Potential Effects within paved Nelson W. Wolfe Memorial Stadium parking lot.

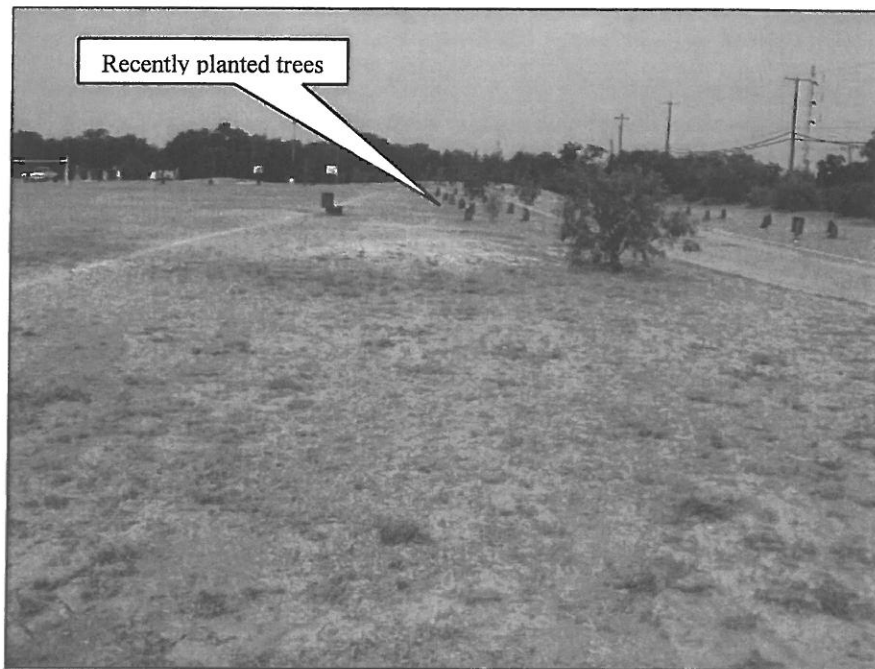


Figure 5. Area of Potential Effects south of Levi Strauss driveway, facing west.

Table 1. Shovel Test Data

| ST ID | Depth (cmbs) | Munsell | Soil Texture Description | Inclusions | Comments |
|-------|--------------|----------|--------------------------|------------------------------|--|
| ST1 | 0–10 | 5YR6/4 | silty clay | | On the eastern edge of Levi Strauss Park soccer fields at corner of fenceline |
| | 10–30 | 5YR7/4 | silty clay | abundant pebbles and gravels | Terminated due to compact soil with gravels and caliche |
| ST2 | 0–15 | 7.5YR5/4 | fine sandy clay | abundant gravels | At the northeastern corner of Levi Strauss Park next to soccer field and Parks and Recreation Department fenceline |
| ST3 | 0–50 | 10YR3/2 | silty clay | calcium carbonate | South of parking lot and playscape within Levi Strauss Park, between planted rows of trees; calcium carbonate increases with depth |
| | 50–56 | 7.5YR5/4 | silty clay | gravels and caliche | Predominantly limestone gravels; terminated due to dense gravels |
| ST4 | 0–35 | 5YR6/3 | sandy loam | rare calcium carbonate | In Rodriguez Park approximately 100 m north of Leon Creek channel near playscape and picnic tables; terminated due to extremely compact soil |
| ST5 | 0–20 | 7.5YR3/1 | sandy clay | modern trash | Along worn trail between Old Hwy 90 and Rodriguez Park; modern trash in upper 20 cmbs |
| | 20–40 | 10YR6/4 | sandy clay | some gravels | Terminated due to dense gravels at 40 cmbs |
| ST6 | 0–14 | 5YR4/3 | sandy clay | modern trash | At the southwest corner of pavilion on edge of terrace; large pecan trees nearby; bits of modern trash common |
| | 14–30 | 5YR5/4 | sandy clay loam | modern trash | Some charcoal and chunks of concrete |
| | 30–100 | 5YR5/3 | sand | | Terminated at 100 cmbs |
| ST7 | 0–40 | 5YR5/3 | sandy clay | rare calcium carbonate | Just east of Rodriguez Blvd. on edge of terrace, 50 m north of Leon Creek; terminated due to compact soil |
| ST8 | 0–20 | 5YR5/8 | silty clay | caliche | In wooded area, southwest portion of loop; reclaimed pit/quarry area; heavily disturbed |
| | 20–30 | 5YR7/3 | caliche | caliche | Soft caliche bedrock, decomposing; terminated due to bedrock |
| ST9 | 0–20 | 5YR7/3 | silty clay | caliche | Northern portion of loop in reclaimed pit/quarry area; heavily disturbed; terminated at decomposing bedrock |

and proposed impacts of up to 25 feet for pedestrian bridge construction. Because of the sloping eastern bank and dense tree cover, Backhoe Trench 1 (BHT1) was excavated on the high terrace edge within Levi Strauss Park. Although this particular area will not be deeply impacted, the trench was utilized to explore the nature of the terrace deposits within the project area. Soil in this location consisted of approximately 20 cm of imported topsoil above ancient, caliche and gravel rich terrace deposits with marine mega fossils (Figure 6). This soil predates human occupation and the trench was terminated at a depth of 110 cmbs (Table 2).

BHT2 was excavated on the west bank of Leon Creek immediately south of Old Highway 90. Soils in this trench were characterized by high energy clay and gravel deposits above low energy sandy clay with no gravel. This lower horizon presents the only likely conditions for cultural deposition; however, no artifacts were present in BHT2. The water table was encountered 208 cmbs, at which depth trench excavation was terminated (Figure 7, see Table 2). Shovel Test 5 (ST5) was excavated on the low terrace to the south of Leon Creek due to the shallow nature of proposed impacts. This area is an existing trail, worn bare by foot and minimal vehicular traffic, exposing approximately 50 percent of the ground surface (Figure 8). Modern trash is prevalent, including several large household items that have been illegally dumped in the area. ST5 encountered sandy clay with modern trash buried within the upper 20 cmbs. The test was terminated at a depth of 40 cmbs due to compact clayey sediment with some gravel.

A third backhoe trench (BHT3) was excavated south of Rodriguez Park at the second creek crossing. This trench was placed immediately east of the proposed bridge location due to the presence of a manhole indicating a potential buried pipeline within the project area (Figure

9). Soils in this trench consisted of approximately 40 cm of recent sandy clay deposit over high energy gravelly clay (Figure 10). Modern trash was present in the eastern trench wall at a depth of 15 cmbs, indicating very recent flood deposits. No additional cultural material was noted and the trench was terminated at 135 cmbs, at which depth the water table was encountered (see Table 2). No trenches were excavated on the north side of Leon Creek within Rodriguez Park due to a steeply sloping bank and the presence of several large trees with a shallow root structure within the project APE (Figure 11).

Within Rodriguez Park, approximately 350 m of proposed trail APE follows Leon Creek between Jerome Road and Rodriguez Blvd. This area is characterized by developed park land, with playscapes, sidewalks, concrete picnic table pads, and a large pavilion (Figures 12 and 13). Surface visibility in this area ranges from approximately 30 to 60 percent through maintained, patchy grass and weeds. The APE essentially skirts the built features through the park on the upper edge of the terrace. Three shovel tests (STs 4, 6, and 7) were excavated to supplement pedestrian survey in this area, revealing very compact soil with no significant cultural material. Modern trash was encountered to a depth of 30 cmbs in ST6 immediately southwest of the large pavilion area. The test was ultimately terminated at a depth of 100 cmbs within homogeneous sand.

The trail continues to the west of Rodriguez Blvd., making a one-mile loop through a currently wooded area. This entire section of APE is heavily disturbed by modern activity, including paved roadways, transmission line construction, and most notably, a filled and reclaimed pit/quarry area. Two shovel tests were excavated within the loop area to verify disturbance, and both encountered heavily calcified ancient clay fill (ST8 and ST9). The general area consists of mostly young hard

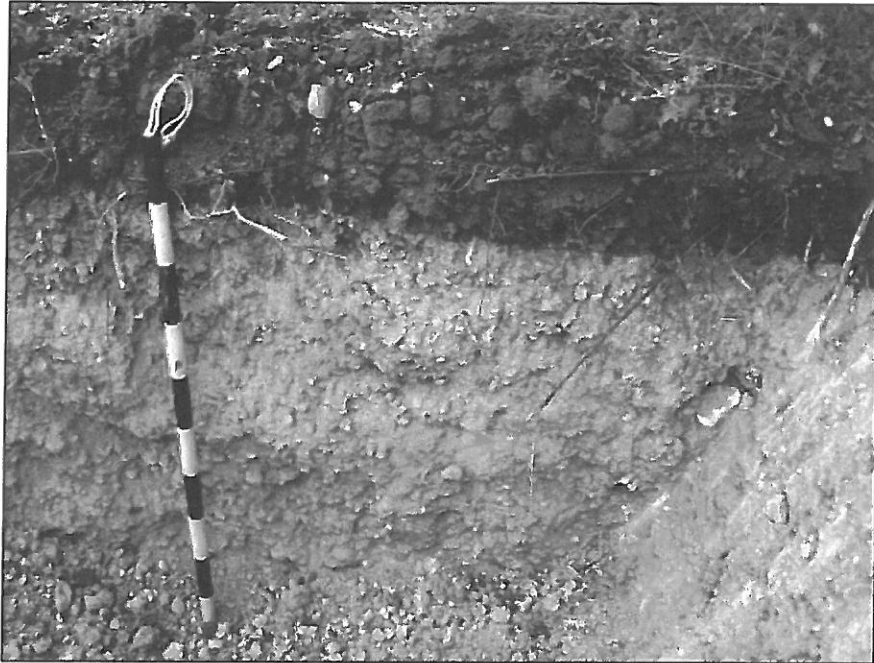


Figure 6. BHT 1 south wall profile.

Table 2. Backhoe Trench Data

| BHT ID | Depth (cmbs) | Munsell | Soil Texture Description | Inclusions | Comments |
|--------|--------------|----------|--------------------------|--|--|
| BHT1 | 0–22 | 10YR3/2 | sandy clay | roots, rootlets, small gravels | Located on high terrace of Leon Creek, near basketball court in Levi Strauss Park; imported topsoil |
| | 22–110 | 7.5YR7/6 | fine sandy clay | rootlets, calcium carbonate nodules, snail shell, limestone gravels, marine mega fossils | Ancient terrace deposits; terminated due to ancient soil |
| BHT2 | 0–29 | 10YR3/2 | fine sandy clay | gravels, roots, rootlets, insect burrows | Located on the west bank of Leon Creek, west of Levi Strauss Park |
| | 29–54 | 7.5YR4/1 | compact sandy clay | iron oxide staining, abundant gravels, roots | Common iron oxide staining throughout |
| | 54–93 | 7.5YR5/4 | coarse sand | organic leaching at top of horizon, abundant large cobbles, roots | This lens at the top of horizon/bottom of level 2 is likely post depositional leaching of organic matter which has created a grayish and inconsistent lens |
| | 93–146 | 10YR5/3 | coarse sandy clay | few roots, few gravels | Terminated due to water table at 208 cmbs |
| BHT3 | 0–25 | 10YR3/2 | sandy clay | roots, rootlets, snail shell, few gravels | Located across Leon Creek from Rodriguez Park; modern trash at 5 to 15 cmbs |
| | 25–39 | 10YR5/3 | silty clay | sand inclusions, roots, rootlets, small calcium carbonate flecking | No cultural material |
| | 39–70 | 10YR3/1 | clay | common roots, rootlets, some charcoal | No cultural material |
| | 70–125 | 10YR3/1 | clay | abundant gravels, sand, cobbles | No cultural material |
| | 125–135 | 10YR4/1 | clay | abundant gravels and cobbles with common iron oxide staining | Terminated due to water table at 135 cmbs |



Figure 7. BHT 2 south wall profile.



Figure 8. Worn trail between Old Highway 90 and Rodriguez Park, facing southeast.



Figure 9. Area of Potential Effects south of Leon Creek and Rodriguez Park with manhole, facing east.



Figure 10. BHT3 east wall profile.



Figure 11. Area of Potential Effects on north bank of Leon Creek within Rodriguez Park, facing north.



Figure 12. Area of Potential Effects within Rodriguez Park, south of pavilion, facing east.



Figure 13 Area of Potential Effects within Rodriguez Park between pavilion and Rodriguez Boulevard, facing west.

woods (10–20 years) with some larger diameter trees at the periphery of the area, patchy grass, and leaf litter, which afforded approximately 50 percent surface visibility. During the pedestrian inspection it was apparent that this area had been heavily modified in the past. Soils encountered appeared churned and a number of sink holes are apparent, presumably where air pockets in the fill dirt subsequently settled and collapsed. Large spoil piles parallel and occasionally intersect the APE (Figure 14). The eastern portion of the loop runs along the edge of the reclaimed pit/quarry area and the western edge of barren, more recently active quarry area. The APE then follows an existing paved road between the quarry area and Keitha Road.

An additional trail access loop includes the paved sidewalk along Gena Drive between Old Highway 90 and an eastern entrance to Rodriguez Park at Jerome Road (Figure 15). From this point, the APE follows an existing gravel trail on the north/west side of Jerome Road (Figure 16). Disturbance to this area is extensive and has limited the integrity of the area. The area was subject to pedestrian inspection and photographically documented, however, no shovel testing was deemed necessary due to the previous disturbance.

Overall, survey investigations consisted of 100 percent pedestrian inspection, supplemented with three backhoe trenches and nine shovel tests. No new or previously documented cultural resources were identified and the project APE is characterized as a largely disturbed context. Disturbance due to park construction, buried utilities, overhead utility support structures, pit/quarry activity, paved roadways, and drainage ditches were all noted within the project area.

SUMMARY AND RECOMMENDATIONS

SWCA conducted an intensive cultural resources survey of the proposed Highway 151 to Camargo Park segment of the Leon Creek Hike and Bike Trail Project in west Bexar County. Cultural resource investigations were conducted to satisfy the requirements of the Antiquities Code of Texas (Permit No. 5945) and the San Antonio HPO per the City of San Antonio Historic Preservation and Design Section of the Unified Development Code (Article 6 35-630 to 35-634).

The investigations included a background literature and records review and an intensive pedestrian survey with subsurface investigations. The background review revealed that a small portion of the APE had been previously surveyed and no previously recorded sites were within or adjacent to the project area. Five previously recorded archaeological sites, seven archeological surveys, four testing investigations, and two historical markers are recorded within a one-mile radius of the project area. The survey included three backhoe trenches and nine shovel tests placed in areas that had the highest potential for containing buried cultural materials with good integrity.

THC/Council of Texas Archaeologists standards require 16 shovel tests per mile for a linear survey less than 100 feet wide. The current survey did not meet this requirement as only about 16 percent (670 m or 2,200 feet) of the project area was found to be relatively undisturbed. The remainder of the project area exhibited various and extensive surface disturbance from modern residential and commercial development. The three backhoe trenches and nine shovel tests excavated during this survey were all negative for cultural material.

Based on the results to this survey, no significant cultural resources will be affected by any

construction activities within the project area.
SWCA recommends no further archaeological
investigations within the project area.



Figure 14. Large spoil pile immediately west of the Area of Potential Effects at south end of loop, facing west.



Figure 15. Sidewalk along east side of Gena Drive, facing north.

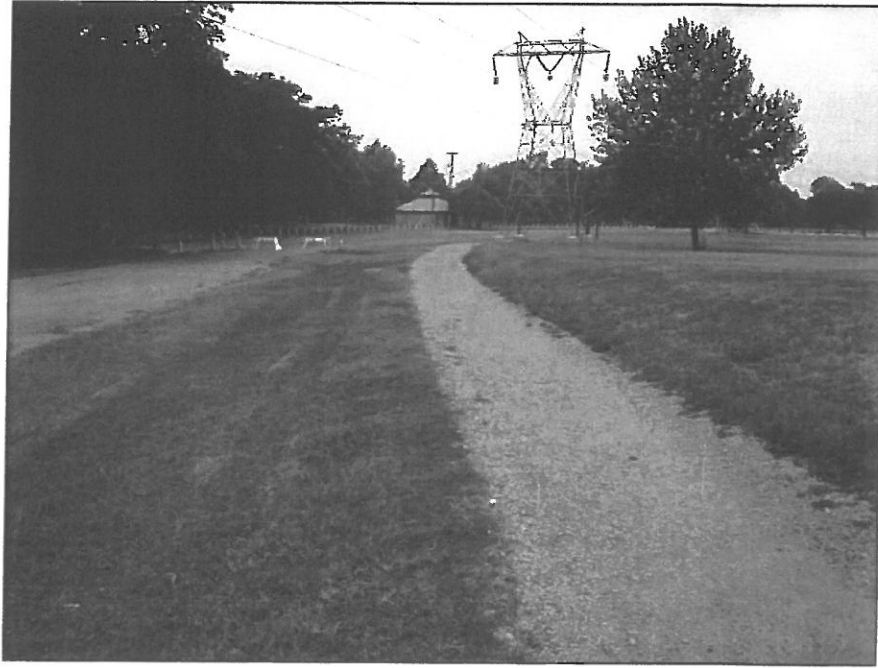


Figure 16 Area of Potential Effects along existing gravel trail within Rodriguez Park. North of Jerome Road, facing west.

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